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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/605,224	09/16/2003	Sean L. Roe	014190-000003	2223
24239	7590	03/16/2006	EXAMINER	
MOORE & VAN ALLEN PLLC			MCMAHON, MARGUERITE J	
P.O. BOX 13706			ART UNIT	
Research Triangle Park, NC 27709			PAPER NUMBER	

3747

DATE MAILED: 03/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/605,224

Applicant(s)

ROE, SEAN L.

Examiner

Marguerite J. McMahon

Art Unit

3747

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 5,8-14 and 16 is/are pending in the application.
- 4a) Of the above claim(s) 10-14 and 16 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 5, 8, and 9 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Election/Restrictions

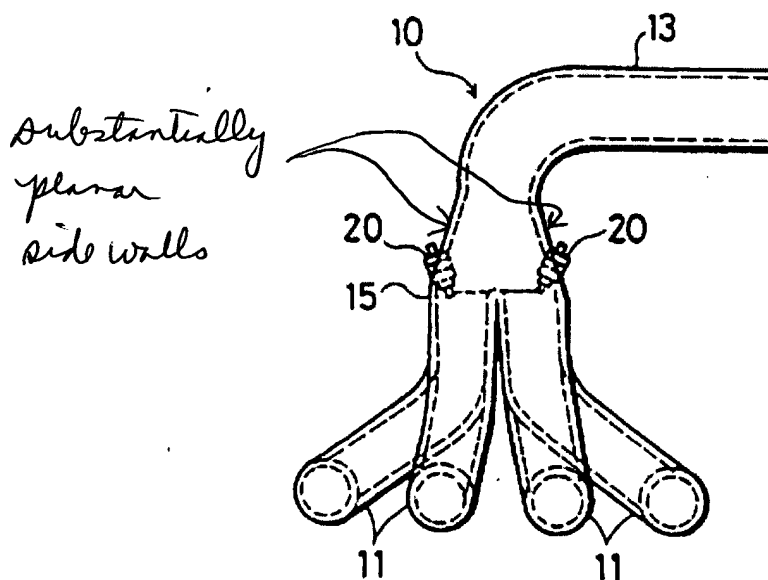
Claims 10-14 and 16 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 12/11/03.

Claim Rejections - 35 USC § 103

Claim 5 is rejected under 35 U.S.C. 102(b) anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Hitomi et al (5,168,839). Note an intake manifold for an engine including an engine block with at least one cylinder inlet which is supplied with an air-fuel mixture from the intake manifold 10 the intake manifold comprising: a housing defining an interior cavity (convergent portion 15) and having an exterior surface, the housing having at least one air in-flow passage 13 from the exterior surface of the housing to the interior cavity and the housing including at least one side wall, the side wall having a substantially planar side wall interior cavity surface and a side wall exterior surface, the side wall defining at least one air-fuel out-flow passage 11 from the interior cavity to the side wall exterior surface, the housing having at least one fuel in-flow passage, surrounding injector 20, from the exterior surface of the housing to the air-fuel out-flow passage between the interior cavity and the exterior surface of the housing, wherein the intake manifold is mounted to engage the engine block so that the air-fuel out-flow passage and the engine cylinder inlet are aligned to allow the air-fuel mixture to pass from the air-fuel out-flow passage to the engine cylinder inlet 5 (see

Figures 3 and 4). Note that the reference shows what appear to be substantially planar walls (above fuel injectors 2) in Figure 4, as shown below, although it is admitted the drawings are not completely unambiguous on this point. It is also noted that the term substantially planar is broad. In addition, if the drawings shown by the reference are interpreted to indicate that the walls above 20 are not flat enough to read on the term "substantially planar", it would have been an obvious to one having ordinary skill in the art to substitute a wall portion which is flat for one which is slightly curved, particularly as the term "substantially planar" is broad, and Applicant has not disclosed that the substantially planar nature of the wall solves any stated problem or is for any particular purpose, and it appears that the device would function equally well with slightly curved walls.

FIG.4



Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 8 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Hitomi et al (5,168,839). Note an intake manifold 10 for an engine, including an engine block with at least one cylinder inlet 5, the intake manifold comprising: a housing having an exterior surface and defining an interior cavity 15, the housing having at least one air in-flow passage 13 from the exterior surface of the housing to the interior cavity, the housing having at least one side wall, the side wall defining at least one air-fuel out-flow passage 11 from the interior cavity to the side wall exterior surface, and the housing defining at least one fuel in-flow passage, surrounding injector 20, from the exterior surface of the housing and opening into the air-fuel out-flow passage, the housing defining at least one fuel in-flow passage, surrounding injector 20, from the exterior surface of the housing and opening into the air-fuel out-flow passage between the interior cavity 15 and the exterior surface of the housing.

Response to Arguments

Applicant's arguments filed 1/12/06 have been fully considered but they are not persuasive. Applicant argues that the reference fails to show a substantially planar side wall. As noted in the above rejection, the reference shows what appear to be substantially planar walls (above fuel injectors 2) in Figure 4, as shown below, although

it is admitted the drawings are not completely unambiguous on this point. It is also noted that the term substantially planar is broad. In addition, if the drawings shown by the reference are interpreted to indicate that the walls above 20 are not flat enough to read on the term "substantially planar", it would have been an obvious to one having ordinary skill in the art to substitute a wall portion which is flat for one which is slightly curved, particularly as the term "substantially planar" is broad, and Applicant has not disclosed that the substantially planar nature of the wall solves any stated problem or is for any particular purpose, and it appears that the device would function equally well with slightly curved walls.

Applicant further argues that the side wall of the housing defining at least one air-fuel out-flow passage from the interior cavity of the housing to the exterior surface is not shown by the reference. Applicant argues that the reference shows the out-flow passage extending from the side wall rather than defining the out-flow passage. This distinction is so subtle as to be lost on the examiner, and in the process of interpreting the claims in the broadest possible light, it fails to hold up.

Finally, Applicant argues that the fuel in-flow passage of the reference goes from the exterior surface to the air-fuel out-flow passage at a point exterior to the side wall of the housing, as more clearly seen in Figures 6, 7, and 8, rather than as claimed in claims 5 and 9, the fuel in-flow passage going from the exterior surface of the housing to the air-fuel out-flow passage, between the interior cavity and the exterior surface of the housing. The problem with this line of reasoning is that Figures 6, 7, and 8 are drawn to a different embodiment than that shown in Figures 3 and 4, and as the

examiner was not relying on the embodiment shown in Figures 6, 7, and 8, that line of reasoning is not relevant.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marguerite J. McMahon whose telephone number is 703-308-1956. The examiner can normally be reached on flex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yuen Henry can be reached on 703-308-1946. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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MARGUERITE MCMAHON
PRIMARY EXAMINER